

REMARKS

Upon the reopening of the prosecution after appeal and in response to the non-final Office Action dated April 21, 2004, Applicants respectfully request reconsideration of the above-captioned application. Claims 21-40 have been canceled and replaced with two new sets of claims, i.e., claims 41-60 and 61-64. These two new sets of claims take a significantly different approach to claiming the invention, but it is respectfully submitted that at least with respect to some of the claims the claim scope has not significantly changed from the originally presented claims.

The newly presented claims render moot all the outstanding rejections. However, to the degree that these rejections could be read on the new claims, they will be addressed. It is hoped by taking this fresh approach the Office will appreciate the novel aspects of the present invention which distinguish it from the applied art.

The Office Action includes a rejection of previously pending claims 21, 23, 25, 29 and 33 under 35 U.S.C. §103 as allegedly being unpatentable over the Nishimura patent (U.S. Patent No. 5,270,810); a rejection of claims 22, 26, 30-32, 35 and 36 under 35 U.S.C. §103 as allegedly being unpatentable over the Nishimura patent in view of the Branson patent (U.S. Patent No. 5,740,801); a rejection of claim 24 under 35 U.S.C. §103 as allegedly being unpatentable over the Nishimura patent in view of the Satake et al. patent (U.S. Patent 5,317,399) and a rejection of claim 34 under 35 U.S.C. §103 as allegedly being unpatentable over the Nishimura patent in view of the Satake patent and in further view of the Branson patent.

Additionally, as an alternative set of rejections, claims 21-23, 25-33 and 35-40 were rejected under 35 U.S.C. §102(e) as allegedly being anticipated by the Hammack et al. patent (U.S. Patent No. 6,088,053); a rejection of claims 24 and 34 as allegedly being unpatentable over the Hammack et al. patent in view of the Satake et al. patent. These rejections are respectfully traversed.

The Hammack et al. Patent

The Hammack et al. patent discloses a pair of binoculars that include a video recording component. In several embodiments, a standard binocular telescope is disclosed as being augmented by a digital video camera mounted to a central portion of the binoculars. The video camera has its own receiving lens for receiving images in parallel to the line-of-sight of the monocular components of the binocular. In the embodiment shown in Figure 7, for instance, the optical binocular and components are omitted and the binoculars are entirely electronic in their nature. As highlighted by the Examiner, column 5 discloses that the embodiments shown in Figures 7, 8 and 10 include eye viewing member 64a, 64b which include display devices 66a, 66b and drivers 68a, 68b. The unit 60 includes a zoom control function 70 which has a zoom portion 70a and an unzoom portion 70b. Depressing the zoom portion 70a of the zoom button 70 causes the camera lenses to increase focal length thus zooming in on a scene being viewed. Depressing the unzoom portion 70b of the zoom button 70 causes the focal length of the camera lenses 62a, 62b to decrease, thus expanding on the scene being viewed. There is the possibility of the digital video camera providing recording and playback of a viewed event. This patent does

not achieve, nor does it purport to attempt to achieve, the advantages or structure of the present invention.

The Present Invention

The present invention relates to a viewing instrument where the images being viewed by the user may be frozen and thereafter magnified in such a manner that the highly magnified image may be viewed without discomfort due to the shaking movements of the image, for instance. The viewing device, however, allows the user to perform a wide-angle-of-vision search for an image to be magnified in a first, real-time mode. Stated differently, when observing a distant bird, for instance, the binocular embodiment can focus on the bird. Thereafter, a still image of the bird can be rendered and magnified. If simple magnification were invoked, the image of the bird would tend to be blurred or shake because of the natural unsteadiness of the user's hands. At high magnification over 10x, for instance, the hand shaking of the operator becomes distracting and can often cause the object being viewed to be lost in the field of view. The present invention achieves a suitable viewing experience at a degree of magnification that would otherwise not be achievable in a straightforward zooming function.

Hence, it should be seen that the Hammack et al. patent does not achieve an object or the structure of the present invention nor would it be obvious to modify it to do so. The Hammack et al. patent basically is designed to record what is being viewed by the user. In various embodiments where the digital recording capability is separate from the binoculars, what is being viewed by the user is simply recorded.

Even in the fully electronic form it does not include optical monoculars but includes right and left digital viewing cameras and display devices, the purpose is simply to duplicate the zooming function and having the capability of recording what is being viewed. None of this suggests any appreciation for the present invention.

Specifically, the present invention provides for two modes wherein in a still image mode the image can be enlarged without necessitating the user from changing his viewing position relative to the viewing instrument. The user can simply view the images through the eye pieces whether live images or still images that can be enlarged and, once done viewing the enlarged image, the system simply returns or restores to the less enlarged view for real time viewing.

It is also in marked contrast that the Hammack et al. patent, which requires the image be unzoomed. The need to depress an unzoom button tends to be less than ideal in light of the present invention. This is evident insofar as the image, such as the bird, can be lost during the zooming function (assuming that one would modify the Hammack et al. device to include a high range of magnification) due to hand shaking, etc. Unzooming it would not necessarily facilitate finding the object again. In contrast, the present invention permits the user to find an object, switch into a still image mode to permit enlargement of the still image, and then simply exiting the mode to permit a restoration of the live image at a decreased magnification, for instance, thereby minimizing the chance of the object becoming lost from the field of view.

Additionally, while still images in video technology is relatively common, it is the unique combination of the two modes as recited in the distance view instrument

claims that is novel. It is respectfully submitted that the mere idea of being able to pause an image would not lead one skilled in the art to freeze an image to permit magnification while viewing the image through the eye pieces of a telescopic viewing instrument and, once exiting this mode, permit the real time image to be viewed at the magnification set prior to the still image being generated.

The Secondary Reference

The secondary reference, Satake et al. patent, may support the allegation that a timer for controlling the time interval of a displayed or frozen image is well known. However, the claims actually recite automatically providing alternating moving and frozen images at suitable intervals. For support of this claim recitation see page 2, lines 30-32 of the original application. Hence, even in hypothetical combination and assuming for argument sake that the Satake et al. patent supports a broad teaching of using a timer to control the time interval between the displayed frozen images is well known, such a broad teaching would not suggest to one of ordinary skill in the art the recitations in the claims, as identified above.

The Nishimura et al. Patent

As previously explained, the Nishimura et al. patent is directed to an endoscope which is not designed to view distant objects. The Office's position that distant objects can be any distance "regardless of the length of the distant [sic]" is not fully appreciated. As previously discussed, the Office need look no further than its own classification definitions. For instance, the definition of Class 359, subclass

368, in defining categories relating to microscopes suggest that the subject matter is “designed to focus highly divergent light from an object very close to an objective.” This is in contrast to the classification definition for Class 359, subclass 399, regarding telescopes of which binoculars and monoculars such as the present invention are species. This definition includes the words “wherein the compound lens system is designed for viewing distant objects.” (Emphasis added) Insofar as the Applicants are using the very same terminology utilized by the U.S. Classification Definitions for distinguishing telescopes from microscopes, it is respectfully submitted that the Office should accept this term to mean what it is officially accepted to mean by the U.S. Patent and Trademark Office, by the industry, and in accordance with the present specification, i.e., an instrument that views objects at a distant rather than very close to the objective lens such as an endoscope.

Whether one views “distant” as including near objects, it is nevertheless apparent that the Nishimura et al. patent does not meet the recitations of the claims insofar as it discloses a switch for selectively supplying signals from an image memory that stores video signals, or from a still image memory which stores still images on a monitor, in contrast to a telescope or binocular which displays real time images in one mode, and still, enlarged images in a second mode. The Nishimura et al. patent merely records still images. There is no suggestion that these aspects of an endoscope would be adopted in a telescope or binocular in accordance with the present claims.

The Secondary References

The secondary references, the Branson and Satake et al. patents, do not change the basic arguments presented above. Even if one were to assume for instance that the Branson patent disclosed a viewing instrument that include the capability of magnifying an image, it nevertheless would not teach modifying an endoscope to be a telescope for viewing distant objects wherein a real time image is displayed in a first mode and, in a second mode, still images displayed that can be enlarged, and upon reentry of the first mode the real time image is displayed as previous magnification through eye pieces, rather than display devices, for instance. As mentioned before, the Satake patent does not provide specific enough teachings to meet the recitations of the pending claims either.

In light of the foregoing, Applicants respectfully request reconsideration and allowance of the above-captioned application. Should any residual issues exist, the Examiner is invited to contact the undersigned at the number listed below.

Respectfully submitted,

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